

# Year 6 - Light

## National curriculum objectives:

*To recognise that light appears to travel in straight lines and shadows have the same shape as the objects that cast them.*

*Objects are seen because they give out or reflect light into the eye*

## Ideas of how to do this whilst on lock down:

- <https://www.bbc.co.uk/bitesize/topics/zbssgk7>
- Make a poster detailing different types of light sources e.g. Sun, torches etc.
- Create shadow puppets and use to investigate the relationship between light sources, object and the shadows they create.

## Investigation

- Go outside in the morning, stand in the sun and mark an X on the ground where your feet are. Draw around your shadow in chalk and measure the length. Keep repeating this throughout the day, standing on the same X each time.
- Observe how your shadow size changes in length each time.
- Log the measurements and plot the findings on a graph (choose your preferred way of recording this).
- Interpret the results: what has happened and why?
- Explore the relationship between the length of the shadow, the height of the sun in the sky and the Earth's axis.

# Make your own glow worm

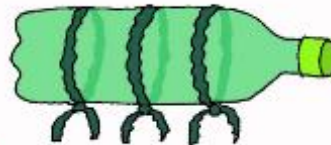
## You will need

Empty, cleaned  
out and label  
removed

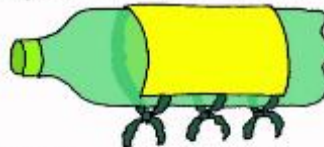
- small green plastic bottle 
- glow stick 
- long, metallic or black pipe cleaner 
- three long green or black pipe cleaners 
- two yellow beads 
- two pieces of card 
- strong glue 
- scissors 
- black paint 
- sheet/old newspapers (to cover your table with) 

Do you love a glow stick? We've got a fab wildlife creation for you to try... it even involves a bit of recycling too!

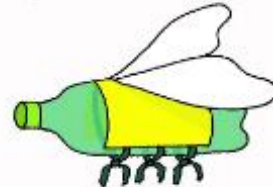
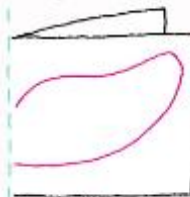
- 1 Twist your three green or black pipe cleaners around the middle of the bottle. Bend them to look like legs.



- 2 Wrap a piece of card around the bottle, leaving a space around the legs. Glue the card onto the body.



- 3 Fold the other piece of card in half. Cut out a wing shape. Unfold, then glue the wings on top of the glow worm's body.



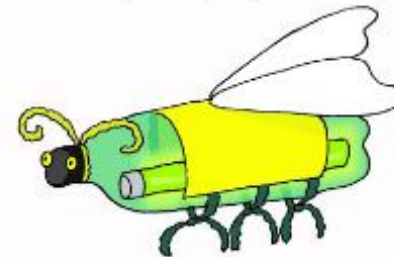
- 4 Paint the bottle cap black. Once dry, screw it back onto the bottle. Glue the two beads to the side of it as eyes.



- 5 Wrap your metallic pipe cleaner around the neck of the bottle, twisting it into place. Curl up the ends to create the antennae.



- 6 Remove the lid from your bottle. Activate your glow stick (follow the manufacturer's instructions) and place inside the bottle. Secure your lid and ta-da... you've got yourself a glow worm!



These can  
be used over  
again - just  
pop in a new  
glow stick!